

## AMENDMENTS TO THE CLAIMS

**Claim 1 (Original)** An optical receptacle comprising:

    a precision sleeve;

    a stub with an optical fiber fixed to one end of an inner hole of the precision sleeve through an adhesive; and

    a sleeve holder fixed to an outer periphery of the precision sleeve by press-fitting or through an adhesive, wherein

        an outer periphery of the stub with an optical fiber and/or the inner hole of the precision sleeve has a surface roughness Ra value of  $0.1 \mu\text{m}$  or more and  $0.5 \mu\text{m}$  or less.

**Claim 2 (Original)** An optical receptacle according to claim 1, wherein the outer periphery of the stub with an optical fiber and/or the inner hole of the precision sleeve has a surface roughness Ra value of more than  $0.2 \mu\text{m}$  and a surface roughness Ry value of  $4.0 \mu\text{m}$  or less, and a difference between an average line and a peak line of surface roughness is  $2.0 \mu\text{m}$  or less.

**Claim 3 (Currently Amended)** An optical receptacle according to claim 1 or 2, wherein a core of the optical fiber has a concentricity of  $0.5 \mu\text{m}$  or less with respect to the outer periphery of the stub with an optical fiber.

**Claim 4 (Currently Amended)** An optical receptacle according to any one of claims 1 to 3 or 5, wherein the inner hole of the precision sleeve has a larger inner diameter by 0 to  $1.5 \mu\text{m}$  than an outer diameter of an optical fiber connector ferrule.

**Claim 5 (Currently Amended)** An optical receptacle according to any one of claims 1 to 4 or 5, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 6 (Currently Amended)** An optical receptacle according to any one of claims 1 to 5 or 6, wherein the precision sleeve is formed of glass or crystallized glass.

**Claim 7 (Currently Amended)** An optical receptacle according to claim 5 or 6, wherein the crystallized glass has a crystal grain size of  $0.1 \mu\text{m}$  to  $1.0 \mu\text{m}$ , and the crystallized glass contains crystals in an amount of 30 to 70 mass%.

**Claim 8 (Currently Amended)** An optical receptacle according to ~~any one of claims 1 to 7~~ claim 1, wherein the adhesive contains 10 vol% or more of fillers having a maximum particle size of  $0.5 \mu\text{m}$  or less and an average particle size of  $0.3 \mu\text{m}$  or less.

**Claim 9 (New)** An optical receptacle according to claim 2, wherein a core of the optical fiber has a concentricity of  $0.5 \mu\text{m}$  or less with respect to the outer periphery of the stub with an optical fiber.

**Claim 10 (New)** An optical receptacle according to claim 2, wherein the inner hole of the precision sleeve has a larger inner diameter by 0 to  $1.5 \mu\text{m}$  than an outer diameter of an optical fiber connector ferrule.

**Claim 11 (New)** An optical receptacle according to claim 3, wherein the inner hole of the precision sleeve has a larger inner diameter by 0 to  $1.5 \mu\text{m}$  than an outer diameter of an optical fiber connector ferrule.

**Claim 12 (New)** An optical receptacle according to claim 9, wherein the inner hole of the precision sleeve has a larger inner diameter by 0 to  $1.5 \mu\text{m}$  than an outer diameter of an optical fiber connector ferrule.

**Claim 13 (New)** An optical receptacle according to claim 2, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 14 (New)** An optical receptacle according to claim 3, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 15 (New)** An optical receptacle according to claim 9, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 16 (New)** An optical receptacle according to claim 4, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 17 (New)** An optical receptacle according to claim 11, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 18 (New)** An optical receptacle according to claim 12, wherein a capillary of the stub with an optical fiber is formed of crystallized glass.

**Claim 19 (New)** An optical receptacle according to claim 2, wherein the precision sleeve is formed of glass or crystallized glass.

**Claim 20 (New)** An optical receptacle according to claim 3, wherein the precision sleeve is formed of glass or crystallized glass.